

CLAIMS

1. A method of allocating communications resources in a radio communications system comprising a first subsystem (1) and a second subsystem (2) using different radio access techniques and adapted to communicate with radio terminals (3), the method comprising the following steps:
 - determining an indication about the occupancy of the communications resources of said first and/or said second subsystem, and
 - when a call is to be set up for a radio terminal, allocating a communications resource of the first or second subsystem to the call taking into account the indication so determined.
2. A method according to claim 1, wherein, if the radio terminal for which a call is to be set up is attached to the first subsystem (1) and if taking account of the indication that has been determined implies allocating at least a communications resource of the second subsystem (2) to support the call, an indication is sent to the radio terminal so that it attaches itself to the second subsystem before allocation of the communications resource to the second subsystem.
3. A method according to claim 2, wherein said indication sent to the radio terminal is a message commanding it to attach itself to the second subsystem.
4. A method according to claim 2, wherein the radio terminal is adapted to select a base station (10, 20) of the radio communications system based on selection parameters and measurements effected on radio signals received from a plurality of base stations of the radio communications system and said indication sent to the radio terminal is a broadcast update of at least some of the selection parameters, which are modified to favor the selection of a base station of the second subsystem (2).

5. A method according to any preceding claim, wherein calls between the radio terminals (3) and the first subsystem (1) or the second subsystem (2) are carried out in packet mode or in circuit mode and a communications resource of the first or second subsystem is allocated to the call taking account of the indication that has been determined only if said call is to be carried out in packet mode.
6. A method according to any preceding claim, wherein a communications resource of the first subsystem (1) is allocated to the call if the indication relating to the occupancy of the communications resources of the first subsystem reveals an occupancy below a threshold value (Lt) and a resource of the second subsystem (2) is allocated to the call if said indication reveals an occupancy above said threshold value.
7. A method according to claim 6, wherein the threshold value (Lt) is set so that the first subsystem (1) offers better communication quality than the second subsystem (2) if its communications resources are occupied to a level substantially less than said threshold value and worse communication quality than the second subsystem if its communications resources are occupied to a level substantially above said threshold value.
8. A method according to claim 6 or claim 7, wherein, if the radio terminal for which a call is to be set up is attached to the first subsystem (1), a communications resource of the second subsystem (2) is also allocated to the call if the indication relating to the occupancy of the communications resources of the second subsystem reveals an occupancy below a second threshold value (Lc).

9. A method according to any preceding claim, wherein the radio access technique for said first subsystem (1) or said second subsystem (2) is a code division multiple access (CDMA) technique.

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10. A method according to any preceding claim, wherein the radio access technique for said first subsystem (1) or said second subsystem (2) is a time division multiple access (TDMA) technique.

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11. A method according to any preceding claim, wherein the second subsystem (2) has a substantially narrower frequency spectrum than the first subsystem (1).

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12. A method according to any preceding claim, wherein the indication relating to the occupancy of resources takes into account a quality of service associated with calls for which resources have been allocated.

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13. A method according to any preceding claim, wherein the first subsystem (1) and the second subsystem (2) are each adapted to determine the indication relating to the occupancy of its own communications resources and to obtain the indication that has been determined relating to the occupancy of the communications resources of the other subsystem and whichever of said first and second subsystems to which the radio terminal is attached determines if the communications resource to be allocated to the call is a resource of the first subsystem or the second subsystem.

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14. A method according to any preceding claim, wherein the first subsystem (1) is adapted to communicate with radio terminals (3) for a first set of services and the second subsystem (2) is adapted to communicate with radio terminals (3) for second set of services and allocating a communications resource of the first or second subsystem

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to the call further takes into account the service provided for said call.

15. A radio communications system adapted to use the
5 method according to any preceding claim and comprising a plurality of subsystems (1, 2), at least some of which use different radio access techniques.